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EXAMINER

LEWIS, KIM M

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/027,949

Applicant(s)

CARLSON ET AL.

Examiner

Kim M. Lewis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-23 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *Detailed Action*.

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on 9/30/03 has been received and made of record in the application file wrapper. Claims 13,17 and 18 have been amended. Claims 21-24 have been added. Claims 1-12 have been previously canceled. Claims 13-124 are currently pending.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-15 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,590,420 ("Gunn").

As regards claims 13 and 14, Gunn discloses all features of the method claim including disclosing a friction management method for an object having an exposed surface loading against a portion of a human body having support bones, tissue around the support bones and skin on an outer side of the tissue, comprising the steps of selecting pressure regions of high loads when a load is carried between the object and the portion of the human body, applying selected patches of material having low friction surfaces interfaced between portions of the exposed surface of the object and the skin

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in the selected pressure regions (Figs. 4a, 4b, 4c, 4d, 9 and Abstract, col. 2, lines 32-51).

The applicant should note that the portion of the object that is capable of coming into contact with the user is exposed, and that the pads may be inserted into the footwear or on the foot surface of the user. As such, there are selected pressure regions.

As regards claim 15, note Fig. 3, which shows the calcaneus region being supported.

As regards claim 17, Gunn discloses all features of the claim including a method of reducing trauma to tissue loaded against exposed surface portions of an object comprising the steps of selecting a plurality of support regions of high load where shear load on tissue is likely to cause or has caused damage, and providing a low friction surface patch between each of the selected regions of high load and an object supporting the tissue, such that only the selected regions are supported on low friction surface patches (Fig. 4, Abstract, col. 2, lines 32-51).

The applicant should note that the pads may be inserted into the footwear or on the foot surface of the user. As such, there are selected pressure regions.

As regards claim 18, Gunn discloses the use of Teflon, which is polytetrafluoroethylene (col. 2, lines 52-54).

As regards claim 19, the step of identifying support regions when low friction surface patches are omitted is inherently practiced by not placing patches in those areas.

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As regards claim 20, Gunn discloses that the low friction material may be incorporated into the article by treating a fiber, yarn, fabric or finished article or by weaving the a low friction fiber or yarn into an article or fabric (col. 3). As such, opposite sides of the article with patch have low friction material thereon.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 13, 16, 17, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,732,578 ("Pollack") in view of Gunn.

As regards claims 13 and 16, Pollack discloses a management method for a prosthetic device having a socket for receiving a portion of a limb to be supported and an exposed surface loading against the limb having support bones, tissue around the support bones and skin on an outer side of the tissue. The method includes selecting pressure regions of high loads when the load is carried between the exposed surface of prosthetic device and limb, and applying a pad between the device and the skin in the selected regions (col. 1, line 43-col. 2, line12).

Pollack fails to teach a plurality of pads and that the pad has a low friction. However, Gunn teaches it is conventional to treat articles with a low friction material in order to minimize friction between the skin and the article. This will help to minimize irritation of the skin.

In view of Gunn, it would have been obvious to one having ordinary skill in the art to modify Pollack by treating the pad with a low friction material in order to minimize friction between the skin and the article. This will help to minimize irritation of the skin.

As regards the use of one pad instead of a plurality of pads, Pollack teaches the high pressure points can be alleviated by one pad. However, since Gunn provides a plurality of pads, one having ordinary skill in the art would have been motivated by Gunn

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to provide a plurality of pads at only the high pressure point locations in order to create a more comfortable device.

As regards claim 17, Pollack discloses a method of reducing trauma to tissue loaded against exposed surface portions of an object comprising the steps of selecting a plurality of support regions of high load where shear load on tissue is likely to cause or has caused damage, and providing a low friction surface patch between the selected regions of high load and an object supporting the tissue (col. 1, lines 43-65, col. 2, lines 3-8, and col. 3, lines 1-12).

Pollack fails to teach a plurality of pads and that the pad has a low friction. However, Gunn teaches it is conventional to treat articles with a low friction material in order to minimize friction between the skin and the article. This will help to minimize irritation of the skin.

In view of Gunn, it would have been obvious to one having ordinary skill in the art to modify Pollack by treating the pad with a low friction material in order to minimize friction between the skin and the article. This will help to minimize irritation of the skin.

As regards the use of one pad instead of a plurality of pads, Pollack teaches the high pressure points can be alleviated by one pad. However, since Gunn provides a plurality of pads, one having ordinary skill in the art would have been motivated by Gunn to provide a plurality of pads at only the high pressure point locations in order to create a more comfortable device.

As regards claim 21, Pollack discloses at col. 3, lines 8-12, the step of adding an additional pad after the tissue has been loaded against the object for a period of time.

Once modified to include the low friction pads, one having ordinary skill in the art would have been further motivated to add an additional low friction pad.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunn.

As regards claim 22, as can be read from col. 2, lines 6-7, lines 9-10, lines 12-13 and line 16 of Gunn, the insert can be placed onto the surface of the user. Gunn is silent as to how the insert is maintained on the user. However, the examiner contends that it would have been *prima facie* obvious to one having ordinary skill in the art to modify the insert of Gunn to include an adhesive so as to maintain the insert in place on the user, thereby resulting in a removably affixed insert.

As regards claim 23, note the rejection of claims 13 and 22 above.

### ***Allowable Subject Matter***

Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments filed 9/30/03 have been fully considered but they are not persuasive. More specifically, applicant argues that the friction management method is for a support [sic] has an exposed surface, which is loaded against a portion of the



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human body. This differentiates from the intended use of the Gunn patent, and makes it quite different from any of the teachings of Gunn in that the Gunn patent teaches, even in connection with footwear inserts, that the material itself is impregnated with a low friction material, adding it to the fiber, yarn, fabric or other article. Applicant goes on to assert that Gunn does not deal with a patch or patches that are selectively placed at a time and by a person for removed from the manufacturing process, however, the examiner disagrees. From the brief description of the drawing section of the Gunn patent, Gunn discloses that the inserts can be placed on the user. This clearly infers that the inserts are for selective placement.

In response to applicant's additional comments relating to Gunn and claims 14-24, note the rejections above.

In response to applicant's argument that the Pollack patent adds no substantial additional teaching to the art, tending to render the claim obvious, the examiner disagrees. As can be read from the rejections above, Pollack discloses the claimed methods except for the low friction surfaces patches/pad. Gunn, however, teaches the use of a low friction surface pad/patch. The examiner contends that the substitution of one patch/pad for another requires routine skill in the art and does not patentably define applicant's invention.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim M. Lewis whose telephone number is 703.308.1191. The examiner can normally be reached on Monday-Wednesday from 5:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 703.308.1957. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.3590 for regular communications and 703.305.3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0858.

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A handwritten signature in black ink, appearing to read 'Kim M. Lewis', is positioned above the printed name.

**Kim M. Lewis**  
**Primary Examiner**  
**Art Unit 3761**

kml

January 5, 2004